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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
Toll Free Service Access Codes	)	CC Docket No. 95-155

COMMENTS OF PAGING NETWORK, INC.

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November 1, 1995

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SUMMARY

The Commission's concerns over the implementation of toll free number succession is well founded. As the Commission declared in its Ameritech Order, it is essential to the achievement of the goals of the Communications Act that number resources be made available on an efficient, timely and technology neutral basis.[1] There is a need for the Commission to assure that the industry takes the steps required to make that happen.

The present 800 number crisis is not a matter of number scarcity, it is a matter of the industry's failure to make necessary computer software and other necessary system upgrades on a timely basis. PageNet thus strongly agrees with the Commission's tentative conclusion that "that all network switches in the United States should have at a minimum the software needed to support all toll free codes reserved by the industry in January 1995 installed by 1997".[2] It believes, moreover, that the Commission should go further and require the industry to develop specific plans for the implementation of the remainder of the numbers that the Industry numbering Committee ("INC") has reserved for toll free use and for the further use of any additional resources that may be designated for that purpose in the future.

If the Commission does so, then PageNet believes that the further role of the Commission can and should be limited to largely dispute resolution. The Industry Numbering Committee

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1 See Proposed 708 Relief Plan and 630 Numbering Plan Area Code by Ameritech-Illinois, 10 FCC Rcd 4596 at ¶18 (1995).

2 Notice of Proposed Rulemaking ("NPR") at 20, ¶29.

("INC") has already designated 7 additional service access codes ("SAC") for toll free use. This will increase the supply of toll free numbers by approximately 56 million numbers. If more numbers are needed, there will be no technological limits to further designations. There will thus be no reason why the industry should again be confronted with a failure to make additional numbering resources available on a timely basis as unfortunately occurred with 800 numbers. Ordinary market mechanisms should therefore be sufficient to prevent "warehousing" or other possible threats to the availability of toll free numbers.

To the extent that industry coordination is required to allocate numbers efficiently and to provide for additional rounds of number relief, this is a matter that should in the first instance be resolved by the affected industry itself, through the INC or a comparable industry organization. The industry itself is in the best position to understand the technical and business implications of number administration and it therefore should be able on an consensus basis to achieve solutions that maximize efficiency and best serve the public interest. Where the industry is unable to achieve consensus, then those issues should be resolved by the FCC under its complaint procedures.

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Paging Network, Inc. ("PageNet"), by its attorneys, on behalf of itself and its operating subsidiaries, hereby submits its comments regarding the Commission's Notice of Proposed Rulemaking in the above-captioned proceeding. PageNet is pleased that the Commission recognizes the importance of assuring the timely availability of toll free number resources, and the need for the telecommunications industry, in cooperation with the Commission, to act now to assure that availability.

I. Statement of Interest

PageNet is the World's largest paging carrier with over 6 million paging units in service. Virtually all of these units has been assigned an individual telephone number. The vast majority of these numbers are traditional 10 digit numbers reflecting the area code and exchange in which the paging subscriber is located. A growing percentage of subscribers, however, are opting for toll free numbers.

PageNet expects the paging and messaging customers' need for 10 digit toll free numbers will continue to increase in coming years as the messaging industry expands the nature and scope of

its service offerings, including those offerings made possible by the advent of System Signalling 7 ("SS7").

II. Summary of Position

The Commission's concerns over the implementation of toll free number succession is well founded. As the Commission declared in its Ameritech Order, it is essential to the achievement of the goals of the Communications Act that number resources be made available on an efficient, timely and technology neutral basis.[1] There is a need for the Commission to assure that the industry takes the steps required to make that happen.

The present 800 number crisis is not a matter of number scarcity, it is a matter of the industry's failure to make necessary computer software and other necessary system upgrades on a timely basis. PageNet thus strongly agrees with the Commission's tentative conclusion that "that all network switches in the United States should have at a minimum the software needed to support all toll free codes reserved by the industry in January 1995 installed by 1997".[2] It believes, moreover, that the Commission should go further and require the industry to develop specific plans for the implementation of the remainder of the numbers that the Industry numbering Committee ("INC") has reserved for toll free use and for the further use of any additional resources that may be designated for that purpose in the future.

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If the Commission does so, then PageNet believes that the further role of the Commission can and should be limited to largely dispute resolution. The Industry Numbering Committee ("INC") has already designated 7 additional service access codes ("SAC") for toll free use. This will increase the supply of toll free numbers by approximately 56 million numbers. If more numbers are needed, there will be no technological limits to further designations. There will thus be no reason why the industry should again be confronted with a failure to make additional numbering resources available on a timely basis as unfortunately occurred with 800 numbers. Ordinary market mechanisms should therefore be sufficient to prevent "warehousing" or other possible threats to the availability of toll free numbers.

To the extent that industry coordination is required to allocate numbers efficiently and to provide for additional rounds of number relief, this is a matter that should in the first instance be resolved by the affected industry itself, through the INC or a comparable industry organization. The industry itself is in the best position to understand the technical and business implications of number administration and it therefore should be able on an consensus basis to achieve solutions that maximize efficiency and best serve the public interest. Where the industry is unable to achieve consensus, then those issues should be resolved by the FCC under its complaint procedures.

III. Efficient Use of Toll Free Numbers

PageNet believes that industry guidelines along with market forces will adequately promote the efficient use of toll free numbers, provided that the Commission assures that the available number resources can actually be used on the PSTN. With a total of 64 million numbers already designated by the industry for toll free use, and more available if needed, there is more than an ample supply of toll free numbers to satisfy any foreseeable demand. As long as the industry can be assured that those numbers can actually be used, there should be no incentive to "warehouse" numbers. The existing 70 cent per month charge for numbers should therefore be sufficient to assure that their use is in fact efficient, and the marketplace should therefore determine how they are allocated.

The most serious threat to the efficient use of numbers is the lack of adequate incentives for the software and other system upgrades required to make the available number resources usable in a timely fashion. If the local exchange carriers and interexchange carriers are to be believed, the key bottleneck in 888 availability has been vendor inability to produce the software, and perform all of the testing and debugging that that entails, in a timeframe that would allow delivery of software well in advance of exhaust.[3]

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[3] Secondly, the network providers themselves have had to test the software to be sure it performed appropriately, adding additional months prior to the time 888 could actually be available to customers.

PageNet believes that most if not all of the switch vendors wanted to offer the upgrade to 888 only as part of another software release incorporating enhanced features and/or functions. Implementation even on a code-by-code basis gives vendors the opportunity to earn additional revenues each time a new toll free code is implemented.

It is technically feasible, however, to upgrade network switches now to give the industry the flexibility to gracefully accommodate future additions of toll free SACs to the network. In order to avoid another artificial gap in the availability of toll free numbers, the Commission should assure that any software or other modifications that are necessary in order to make all currently reserved toll free numbers continuously available are ordered to be installed no later than January 1997.[4] If that were to occur, then there would be little reason for Responsible Organizations ("Resp-Orgs") and service providers to warehouse toll free numbers. They would have the assurance that additional numbers can always be made available on a timely basis. Without the Commission's involvement, however, it is unlikely that this will occur because of the likely preference of vendors for a code-by-code or bundled approach to network upgrades.

The Commission must thus direct the industry to formulate and implement specific plans to assure that the necessary upgrades are

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[4] PageNet would include in that requirement that any modifications necessary to accommodate lifting the "D" digit restriction precluding 0 or 1 from usage in the "D" digit be made within that time frame. That simple modification creates 16 million additional numbers, or the equivalent of 2 additional codes.

made, and it must monitor the planning and implementation process to assure that this is accomplished on a timely basis. It cannot permit a recurrence of another failure of the industry to make the necessary upgrades on its own.

IV. Escrow Requirement

PageNet opposes the implementation of an escrow requirement. As already discussed, the current monthly charge for toll numbers should assure the efficient use of toll numbers. An escrow charge would therefore simply increase the costs of providing toll free service without any corresponding public or private benefit.

V. Lag Time

PageNet agrees that existing industry lag time guidelines can and should be shortened. It further believes that the Commission's proposed time limits are reasonable and should be adopted.

VI. Pin Identification Numbers

PageNet is pleased that the Commission recognizes that PIN plans raise "competitive issues" for companies "...because companies requiring their customers to dial ten digits plus a PIN to reach their customers may be at a competitive disadvantage compared to companies requesting their callers to dial ten digits." Notice at ¶21. The Commission also states that it doesn't wish to cause such a disruption or make a competitive imbalance in the 800 market by "imposing a PIN requirement." Id.

However, the Commission nevertheless seeks comments on how it might "facilitate, encourage or reward the use of a PIN system where business plan disruptions would not occur."

Use of PIN technology, in every instance, requires callers to dial the 7 or 10 digit telephone number, then a multiple digit PIN typically perhaps of 7 or so additional digits. As the Commission recognized in the Ameritech Decision, dialing differentials place carriers at a competitive disadvantage.[5] Furthermore, as more fully explained in the attached comments of the Personal Communications Industry Association, which were submitted to the Commissions Common Carrier Bureau, on July 19, 1995, and which are attached hereto as Exhibit A, PIN technology also severely limits the services that wireless carriers (or any carriers, for that matter) can offer. For example, PIN technology would not permit carriers to offer their customers, among other things:

- 10 digit access to the PSTN
- call forwarding
- rotary telephone access
- fax capability
- personal and business announcement services
- caller ID

Just as it is not appropriate for this Commission to attempt to limit or curtail the use of unencumbered toll free numbers by placing artificial restraints on their use, it is not appropriate for the Commission to grant artificial incentives to those who

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5 See Ameritech Decision at ¶¶ 22, 27 & 35.

choose to use PIN technology. The Commission simply has no place interfering with the workings of the marketplace. Those who believe that subscribers want "full service" toll free telephone numbers should be free to offer them, based on market demand and market prices.[6] Those who believe that subscribers want more limited, even bargain basement types of services should be free to offer those, based on market demand and market prices.

If there is a market for these services, someone will offer them. But the Commission should do nothing to make the offering of these services more attractive to customers. That would be substituting its judgment for that of the market, something this Commission has repeatedly declined to do because it is impossible to judge how customers and markets will react to various stimuli. Further, this Commission and this Congress seek to reduce regulatory intrusions into the market, not compound them.

PageNet notes that the suggestion that it might be appropriate to encourage the paging and personal users to use PIN technology is based on the misconceived notion that paging and personal use traffic is often low volume and therefore presumably less important. First, the Commission is not in a position to judge the value of a use of telephone number for either personal or business use, even assuming it was possible to separate out those two uses. To PageNet's knowledge, there has never been a

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[6] The Commission should be very suspect of those who support or endorse PIN technology. Those companies are likely seeking to thwart the continued proliferation of toll free non-PIN services which compete with their own, thereby abusing the regulatory process to give them a potentially greater customer base.

circumstance where the Commission attempted to segregate users of telephone numbers based on volume, call type or for any other reason. The Commission should not attempt to do so here.

Moreover, PageNet expects that the implicit assumption that paging subscribers always have lower volume than landline business users is wrong. There are businesses which are high volume users, and businesses who are low volume users, both for paging and landline 800 services. Lastly, low volume does not translate to less importance. Pagers, for example, are often used to notify Doctors and other emergency personal. While those uses may generate a low volume of traffic, they can be critically important.[7]

VII. Mechanics of Opening New Toll Free Codes

A. Reservation of New Toll Free Codes

PageNet believes that the existing reservation and assignment system under industry guidelines is fair and reasonable. However, the initial opening of the 888 code, and the possibility of multiple requests for the same 888 "vanity' numbers, may require special and temporary measures.

PageNet does not believe that a current 800 number holder has a "right" to the corresponding 888 number. As a public resource, numbers should be made available on a first come, first served

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[7] Adding to the digits required to place such calls creates an increased risk of misdialing that can have serious consequences in the case of an emergency, or where an operator is concerned, increased risk of misrouting such calls.

basis. In light of the possibility of a large number of conflicting requests just after the opening of the new 888 code, PageNet recommends that the Commission establish a process by which Resp-Orgs would be given an equal right to reserve 888 numbers. A random lottery or other equitable process would establish a numeric order of all Resp-Orgs. Each Resp-Org would then be allowed to reserve a limited amount of 888 numbers (for example 100) during that Resp-Org's reservation time. All Resp-Orgs would be allowed rotating turns to reserve their allotment of 888 numbers. This process would be continued until the demand for numbers, including vanity 888 numbers, was satisfied.

B. Phased Introduction of New Toll Free Service Access Codes

Concerns over the possible immediate depletion of the 888 code should be addressed by assuring that additional supplies of toll free numbers will be available. It should not be done by restricting the rate at which numbers are reserved. PageNet believes that once system software and other upgrades have been made to implement the 888 code, implementation of additional codes can be completed within very short time frames. Thus if the Commission will direct the industry to take immediate steps to address system implementation problems, as PageNet urges above, the threat of immediate exhaust should not be a concern. The knowledge that additional resources will be available should help moderate the initial demand. Even if the 888 SAC code is

exhausted within a relatively short period of time, there should be no problem if additional resources are truly made available.

To prevent any overload of the SMS system as Resp-Orgs reserve the new 888 code, PageNet recommends that the Commission establish a schedule for such reservations by assigning each Resp-Org a specific time period in which it can make its reservations. Fourteen time slots could be established with 10 Resp-Orgs assigned to each period. This would accommodate each of the existing approximately 140 Resp-Orgs. Time slots could be assigned randomly on the basis of a lottery. Given existing industry limits on reservations, PageNet believes that this would result in a fair and orderly allocation of available 888 numbers.

C. Implementation Plan for Next Toll Free Code Beyond 888

PageNet agrees that a trigger should be established for industry preparations for the implementation of an additional code. It may, for example, be appropriate to assure that all implementation on the next code begin as soon as the previous code is implemented and that it be required to be implemented no later than 6 months thereafter. That way, the industry would not be dependent on demand forecasting to the same degree it is today. The importance of establishing such a mechanism is heightened by the fact that demand forecasting is an inaccurate, if not speculative science that, by its nature, does not accurately predict new and enhanced uses for service, and thus numbers. A trigger tied to the initiation of a code would take the guesswork

out of code implementation preparation, and allow the industry maximum flexibility and maximum preparedness.

D. Tracking Toll Free Number Usage

PageNet does not object to the Commission tracking toll free number usage by carrier, as proposed. Such reports could be collected either monthly or quarterly and filed with the Commission. PageNet also agrees that aggregated data should be made publicly available, provided that adequate steps are taken to assure that the data does not reveal individual carrier data. However, PageNet notes that the data may be of little value if there is an adequate supply of numbers, thereby eliminating incentives to warehouse.

VIII. Warehousing of Toll Free Numbers

For reasons already stated, PageNet believes that the existing monthly charge for toll free numbers and industry guideline limits on number reservations are adequate to prevent warehousing, provided that the Commission assures that the industry will take the steps required to make additional numbering resources available on a timely basis. It therefore opposes any additional or more restrictive limits on number reservations. If any additional restrictions are to be imposed, PageNet believes that those restrictions should be developed by the INC using consensus procedures.

IX. Vanity Numbers

PageNet strongly opposes any limitation on the assignment of numbers based on a conflict or potential conflict with an existing vanity number, and strongly opposes the granting of any assignment preferences to holders of such numbers.

There is no legitimate basis for reservation of 888 and succeeding toll free numbers to those who hold 800 vanity numbers today.[8] In the first instance, 800 users cannot claim that they need additional numbers in order to meet demands for service. 800 number subscribers who need additional capacity merely need to add additional circuits and trunks; they do not need to add additional telephone numbers. Therefore, for example, any automatic grant of 888 vanity numbers to 800 users would be a waste of numbers.

Secondly, there is a very real risk that any attempt by the Commission to determine when numbers are in fact vanity numbers and award, essentially, a priority status, will delay the availability of 888 numbers for all other users, thereby unreasonably curtailing other users from employing them. This would be a terrible result, especially when as set forth below, adequate legal remedies already exist to protect both the number holder and the public from the fraudulent or unfair use of such numbers. This Commission should not seek supplementation of those remedies within the context of the proposed rules, as it would

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[8] PageNet believes that any attempt even to attempt to determine which numbers are vanity numbers would open Pandora's box, and subject it as well as RESB-ORGS to needless litigation. What is a vanity number to one person or company may well not be a vanity number to another.

needlessly waste number resources, needlessly increase the costs of number administration, and unduly interfere with competition.

Existing trademark and unfair competition remedies already are available to protect code holders from inappropriate uses of vanity numbers where, for example, a competitor seeks to use a similar vanity number to deceive the public as to the source of a product or service. See e.g. American Airlines, Inc. v. 1-800-A-M-E-R-I-C-A-N Corp., 622 F.Supp 673 (N.D. Ill. 1985).

Furthermore, there may be instances where protecting an existing code holder from a possible conflicting vanity number assignment might simply give that holder an unwarranted competitive advantage where the acronym used is either a generic term or a descriptive term without a secondary meaning. See Dranoff-Perlstein Associates v. Sklar, 967 F.2d 852, 855-57 (3rd Cir. 1992). See also Fletcher & Kera, "The Forty-Third Year of Administration of the Landham Trademark Act of 1946," 80 Trademark Rep. 591, 675-76 (1990) (criticizing the protection of vanity numbers using generic terms as trademarks or service marks); Smith, "Telephone Numbers That Spell Generic Terms: A Protectable Trademark or an Invitation to Monopoly?", 28 U.S.F. L. Rev. 1079 (1994).

As the Dranoff-Perlstein decision states, the distinctions that must be made in determining what can be protected involves distinguishing between categories that are "often separated by only the finest of lines" but which are crucial to the outcome. Dranoff-Perlstein Associates v. Sklar, supra, 967 F.2d at 855. It would be prohibitively expensive and inefficient to have highly

factual determinations such as these made as part of the administration of Toll Free Service Access Codes.

Alternatively, assignments based on industrial classification, as proposed in the NPRM (at ¶¶44-46), or similar bright line rules, would be easier to administer, but would unduly interfere with competition.

X. High Volume Numbers

PageNet believes that the possible problem of misdialed high volume 800 numbers is highly speculative and one that can be more appropriately addressed by the INC when, and if, this proves to be a problem.

XI. Circuit Breaker Model

PageNet opposes the adoption of any "circuit breaker" rule. Again, the Commission's emphasis should be on assuring that the industry implements the system upgrades that are required to make already available number resources available on a timely basis. That should wholly preclude the need for any artificial restrictions on the consumption of toll free numbers.

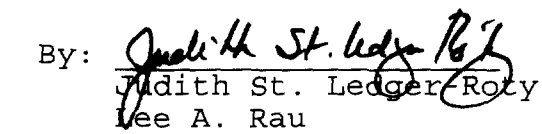
XII. Conclusions

PageNet strongly believes that the Commission must direct the industry to plan and provide for the prompt implementation of additional toll free number resources. That will assure an adequate supply of toll free number resources on a timely basis and permit market forces rather than regulation to determine the

allocation of those resources. Technical and other issues related to number administration should be resolved by the INC using consensus procedures under the oversight of this Commission. The Commission's role should primary be to resolve disputes and to assure the timely implementation of numbering plans.

Respectfully submitted,

PAGING NETWORK, INC.

By: 

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July 19, 1995

Kathleen M. H. Wallman
Chief, Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W., Room 500
Washington, D.C. 20554

Dear Kathy:

Attached is the white paper that follows up on the recent PCIA meeting with you and your staff concerning 800 number usage. PCIA, with enormous assistance from many of its paging members, is submitting this report to the Commission to outline the technical and other problems associated with restricting or otherwise requiring paging operators to employ PIN technology in connection with their toll-free paging services. The report demonstrates that for many technical, competitive, and equitable reasons, the paging industry should not be required to revert back to employing old PIN technologies, when their customers need and demand new, direct dial services.

If you have any questions concerning the white paper or PCIA's views on 800 number usage and PIN technology, please call Mark Golden or Rob Hoggarth of PCIA (467-4770) or myself. PCIA appreciates the opportunity to submit this white paper and looks forward to working with the Commission to develop appropriate policies regarding toll-free numbering resources.

Sincerely,

Robert L. Pettit
Counsel to Personal Communications
Industry Association

Enclosures

cc: Kathleen B. Levitz (w/encl.)

Personal Communications Industry Association's

Proposed Approach For The

Toll-Free Resource

July 19, 1995

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1.0 INTRODUCTION

The Federal Communications Commission (FCC) staff has suggested the paging industry use Personal Identification Numbers (PIN), in combination with a standard 10-digit North American Number Plan (NANP) number, to access toll free paging services. This suggestion is made as a possible solution to meet the increased demand for called party pays (800 toll-free) resources. The growing use of these toll free numbers is due in part to two significant factors. First, 800 numbers are used for a growing number of subscribers and services, including small and large businesses, residential lines, pagers, voice mail, calling cards, Integrated Voice Retrieval (IVR) systems, announcement services, and other innovative services. Second, 800 number subscribers have become increasingly sophisticated and have developed a variety of telecommunications needs.

This report examines the issues and problems associated with the use of PIN dialing arrangements for the provision of messaging services. In addition, this report proposes that, in light of the significant technical, business, and public interest considerations, the opening of new Service Access Codes (SAC) is the logical and reasonable way to provide additional toll-free number resources without the necessity for PIN dialing arrangements.

PCIA is opposed to any restriction or requirement that toll-free number access for paging services be limited to a PIN arrangement for subscriber calling. PIN-based paging services are: (1) technically inferior; (2) less efficient in the use of PSTN network resources; (3) anticompetitive because of the additional dialing requirements; and (4) preclude the use of SS7 technology for future paging and enhanced PCS services.

2.0 BACKGROUND

For the reader's convenience, the following sections describe Special Access Codes, Dialing Arrangements, and the manner in which the paging industry has utilized them. They also provide support for the paging industry's conclusions that PIN technology is not substitutable for many paging uses and would, if required to be implemented, substantially degrade toll free paging services and would put paging carriers at a competitive disadvantage vis a vis their landline and wireless service competitors.